

Blind May Now Read Ordinary
Type of a Daily Newspaper

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BLIND MAY NOW READ ORDINARY TYPE OF A DAILY NEWSPAPER

New Electrical Device Successfully Tested on New York World
—Optophone Also Makes Books and Typewritten Manuscript Available to the Sightless

By THOMAS H. ORMSBEE

A BLIND man may now read a newspaper just as it comes from the press. It need not be translated into raised type. The optophone, a new device, which transforms each printed letter into certain definite musical sounds, makes this possible.

The instrument invented by Prof. E. E. Fournier d'Albe, M. R. L. A., former lecturer on physics at the University of Birmingham, England, has been brought

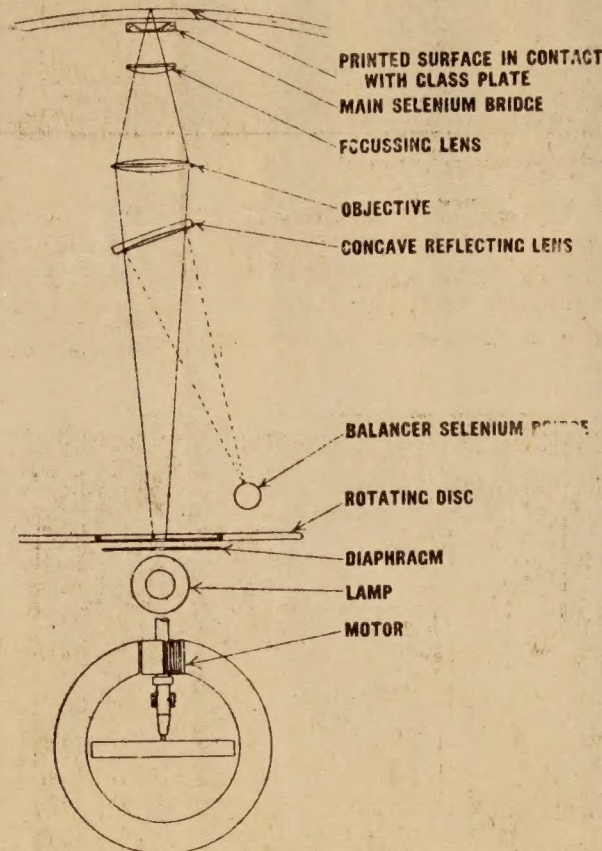
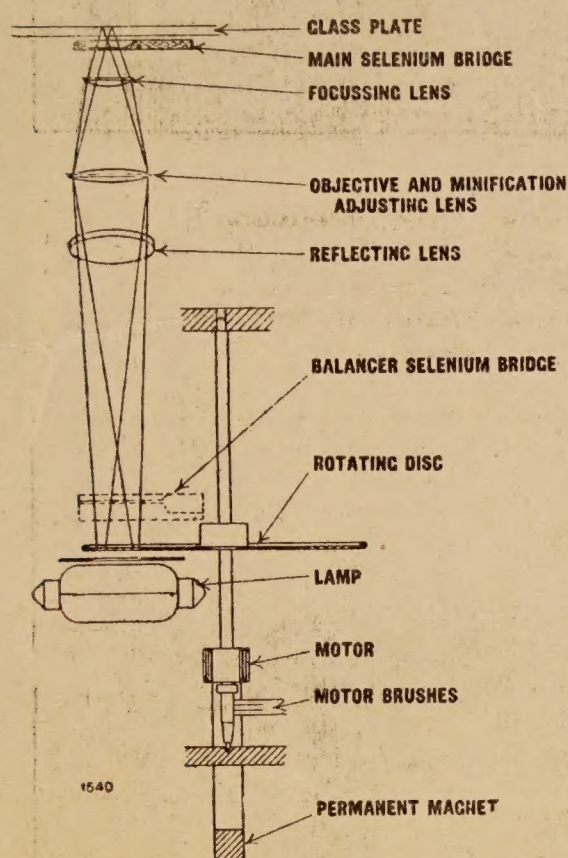
acquiring the ability to identify the letters by their different sound characteristics. This must be done, of course, under the direction of an instructor. Then, like the child again, the blind man learns to read cat, rat, and other simple words. It takes some time to learn these light-wave, sound-wave abc's and simple one-syllable words. Then, gradual practice will enable the student to read his newspaper until he is able to go along at the

gow, Scotland, who have already effected certain refinements over Dr. d'Albe's original instrument, and controlled in the United States by the Federated Engineers Developing Corporation. Officers of this company frankly say that they are still experimenting with the instrument and do not expect great monetary returns from it. The prestige of having brought it here and the satisfaction of real service to the blind is about all the gain they expect.

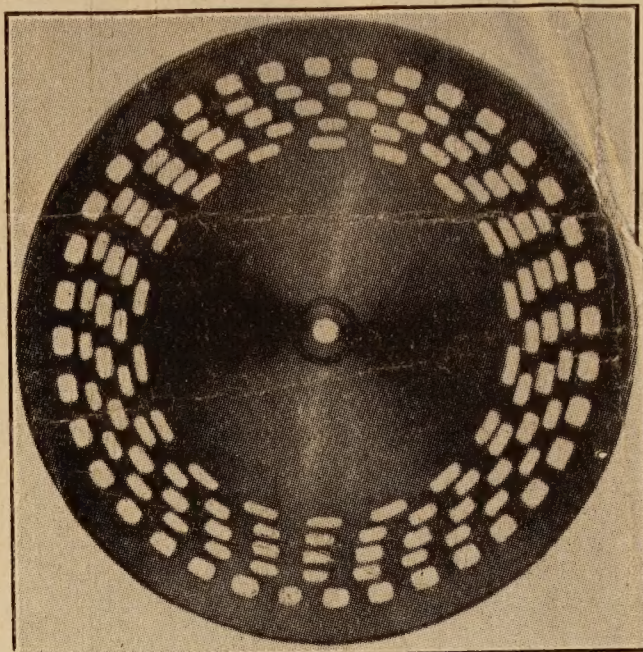
A twelve-year old blind boy is now learning how to operate the optophone

and some books by its use. The first book which she read was Sir Rider Haggard's "Allan, the Hunter," a simple child's story. Since then, she has read "The Newcombs," "Well, Why Not," by Thomas L. Masson, and is now attacking "If Winter Comes." In places the sound waves sometimes are not quite clear to Miss Hogan, but when she comes across an unfamiliar word she is helped out by the context, as are people with perfect vision.

The optophone is not as yet, nor is it ever expected to be, a cheap instrument, because of the delicacy of its mechanism, but those in charge of it expect that they will be able to place it on the market at about \$600. At this price, optophones could be installed at certain places where the blind might use them and in this way have the use of the daily newspapers which are not reproduced in the Braille raised type.



Diagrammatic Arrangement of the Optophone



Rotating Disc of the Optophone

and when he has mastered its use they hope to be able to form a judgment of how speedily a child with the naturally rapid acquisitive faculty can reach the point where the optophone will replace missing eye sight.

In the use of the optophone the blind have one advantage over other people. Their sense of hearing is keener and this enables them to distinguish the slight variations in the sound of different letters with greater ease.

The optophone works with any common size of book type, printed on white paper, and while it will produce sound waves from ordinary typewriting, these are not so easily distinguishable. However, a typewritten page of large bold face type done with a dense black ribbon will be as easily read as print.

Miss Hogan, who has been working with the optophone for several months has already read newspapers, magazines

to the United States and one is now in operation at the offices of the Federated Engineers Development Corporation, Jersey City, N. J., of which T. Irving Potter is president and Dr. Charles P. Steinmetz vice-president. A blind woman, Miss Margaret R. Hogan, a graduate of Barnard College, Columbia University, and instructor in the New Jersey Commission for the Blind, is rapidly mastering the technique of operating the optophone. At a recent demonstration for New York newspaper reporters she read from the front page of the day's New York World with a marked degree of facility.

The scientific principle on which the operation of the optophone is based, first told by Dr. d'Albe at the London Optical Convention in 1912, depends on translation of light and sound through the medium of a selenium cell in a telephone circuit. Stated untechnically it is briefly this—a beam of light, projected through a tiny lens, streaming through five rows of oblong perforations in a revolving disk, is reflected back and transformed into sound by means of selenium cells and is heard by the use of a very sensitive telephone head piece.

These rays of light, which automatically travel across the printed page a line at a time from left to right are somewhat akin to the five musical notes—sol, do, re, mi, and sol again, and produce as they pass over a printed letter a combination of sounds, each letter having a distinct combination of its own. That is, the letter "a" has its own distinguishable high-keyed motif or little purr or whine, always the same and never like the sound of any of the other twenty-six letters in the alphabet. Plain white paper makes no sound at all.

To read by this machine the blind person has first to learn his sound alphabet, starting as the child does and gradually

speed of twenty to thirty words a minute.

The newspaper being read through the medium of the optophone is strapped face down upon a slightly curved glass plate at the top of the instrument, and thus the light ray travels across the print, one line at a time, as does the eye of a normal man.

There are at present but three optophones in the United States. They are manufactured by Barr & Stroud of Glas-



Miss Margaret R. Hogan, instructor in the New Jersey Commission for the Blind, reading daily newspapers by means of the Optophone. Miss Hogan has also been able similarly to read magazines, books and typewritten manuscript printed in ordinary type.

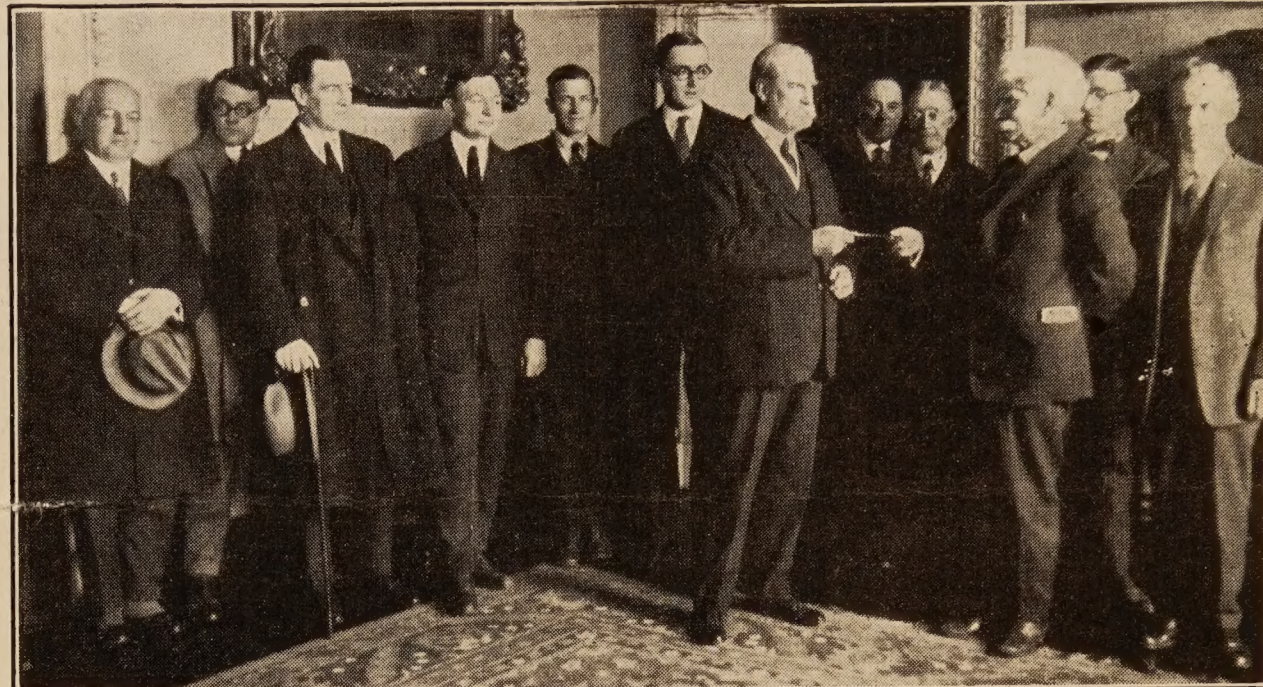
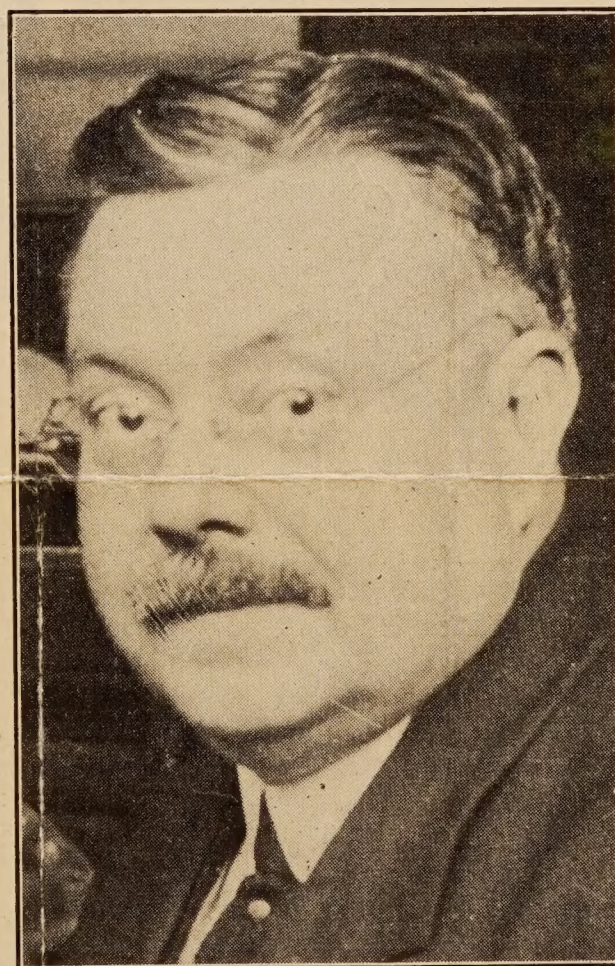


Photo by International

Do newspaper men think well of the stories they write? Very interesting question for debate. There must be something in the favorite author stuff because the Washington correspondents presented Secretary of State Hughes with a pair of gold scissors at the close of his first year in office. What else do they expect him to use them for? Matthew Tighe of Universal Service and dean of the corps, is shown making the presentation.



not there?" asked a fellow reporter once
 nning with his birth in Kentucky and
 which we can pick Spanish-American
 one, McNamara, Thaw, Kennedy, Moli-
 ve arise to repeat, "How could it be?"
 Press Association as day editor. His
 known for the care he gives to the

section of the United States that is
 nd on the East pretty thoroughly by
 e Midwest Circulation Managers Asso-
 at Wichita, Kansas, last week. Discus-
 es kept it from being a dull gathering.
 ho is having a hard time keeping back
 s and gentlemen meet, Sidney D. Long

Forty-two years with the Ledger Company
 is the record of Oscar C. A. Covvey, cashier
 of the Philadelphia Ledger.
 All editors reflect but not always as pro-
 nouncedly as C. W. Boynton, editor of the
 Longmont (Colo.) Ledger, at right.



BLIND MAY NOW READ ORDINARY TYPE OF A DAILY
NEWSPAPER.

by Thomas H. Ormsbee.

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This is No. 1527

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